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Pages: Cover + 9 = 10

Date: February 12, 2008

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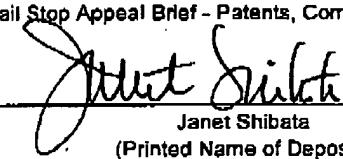
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 Janet Shibata
 (Printed Name of Depositor)

February 12, 2008
 (Date of Signature)

Attention: Commissioner for Patents

Attorney Docket No. PD-201157

Please find attached Re:

Serial No.: 10/074,765

Filed on: February 12, 2002

➤ REPLY BRIEF IN RESPONSE TO EXAMINER'S ANSWER DATED DECEMBER 27, 2007 (9 pages)

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Ashish BANERJI et al.

Application No.: 10/074,765

Group Art Unit: 2613

Filed: February 12, 2002

Examiner: Vo, T.

For: SYSTEM AND METHODOLOGY FOR
VIDEO COMPRESSION

Attorney Docket: PD-201157

REPLY BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Reply Brief is submitted in response to the Examiner's Answer mailed December 27, 2007.

Serial No. 10/074,765

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Patent

I. STATUS OF THE CLAIMS

Claims 1-23 are pending and are on appeal. Claims 1-3, 5, 7, 12, 14, and 16-23 remain rejected under 35 U.S.C. §102(b) as anticipated by *Gonzales* (US 5,414,469). Claims 1-3, 11-14, and 16-23 remain rejected under 35 U.S.C. §102(e) as anticipated by *Wu et al.* (US 6,700,933). Claims 4 and 16 remain rejected under 35 U.S.C. §103 as obvious based on *Wu et al.* (US 6,700,933) in view of *Carnahan* (US 5,414,780). Claims 6, 7, and 16 remain rejected under 35 U.S.C. §103 as obvious based on *Wu et al.* (US 6,700,933) in view of *Kato et al.* (US 5,719,986). Claims 8 and 16 remain rejected under 35 U.S.C. §103 as obvious based on *Wu et al.* (US 6,700,933) in view of *Weinberger et al.* (US 5,680,129). Claims 9 and 10 remain rejected under 35 U.S.C. §103 as obvious based on *Wu et al.* (US 6,700,933) in view of *Moroney et al.* (US 5,771,239). Claims 15 and 16 remain rejected under 35 U.S.C. §103 as obvious based on *Wu et al.* (US 6,700,933) in view of *Chujoh et al.* (US 6,317,461).

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*Patent***II. GROUNDS OF REJECTION TO BE REVIEWED**

Whether claims 1-3, 5, 7, 12, 14, and 16-23 are anticipated under 35 U.S.C. §102(b) based *Gonzales* (US 5,414,469)?

Whether claims 1-3, 11-14, and 16-23 are anticipated under 35 U.S.C. §102(e) based on *Wu et al.* (US 6,700,933)?

Whether claims 4 and 16 are obvious under 35 U.S.C. §103 based on *Wu et al.* (US 6,700,933) in view of *Carnahan* (US 5,414,780)?

Whether claims 6, 7, and 16 are obvious under 35 U.S.C. §103 based on *Wu et al.* (US 6,700,933) in view of *Kato et al.* (US 5,719,986)?

Whether claims 8 and 16 are obvious under 35 U.S.C. §103 based on *Wu et al.* (US 6,700,933) in view of *Weinberger et al.* (US 5,680,129)?

Whether claims 9 and 10 are obvious under 35 U.S.C. §103 based on *Wu et al.* (US 6,700,933) in view of *Moroney et al.* (US 5,771,239)?

Whether claims 15 and 16 are obvious under 35 U.S.C. §103 based on *Wu et al.* (US 6,700,933) in view of *Chujoh et al.* (US 6,317,461)?

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*Patent***III. ARGUMENT**

Appellants maintain and incorporate the positions presented in the Appeal Brief filed May 31, 2007, but present further refutation of certain assertions presented in the Examiner's Answer and provide further clarification of their arguments.

A. CLAIMS 1-3, 5, 7, 12, 14, AND 16-23 ARE NOT ANTICIPATED BY *GONZALES ET AL.*

1. *Gonzales et al.* fails to disclose "splitting the video data set consisting of non-intra video frames into a plurality of data sequences" as set forth in claim 21.

In response to Appellants' argument that *Gonzales* cannot anticipate claim 21 because that claim requires a "video data set consisting of non-intra video frames" while *Gonzales* discloses a group of pictures (GOP) that must start with an I-picture and may even include additional ones, the Examiner again relies on *Gonzales*' GOP as the video data set consisting of non-intra video frames, referring to col. 3, lines 43-44, of *Gonzales* (page 11 of the Examiner's Answer). That is, the recitation of a "video data set consisting of non-intra video frames" means that the video data set may never include anything but non-intra video frames, i.e., no I-pictures may ever be present in the claimed video data set. *Gonzales*, on the other hand, leaves open the possibility that I-pictures, or intra-video frames, may be present in the "video data set." Accordingly, *Gonzales* cannot anticipate the subject matter of independent claim 21. The portion of *Gonzales* relied on by the Examiner, recites that "[e]ach GOP must start with an I-picture and additional I-pictures can appear within the GOP" (emphasis added). The fact that, in *Gonzales*, additional I-pictures can appear means that, in *Gonzales*, the video data set (or GOP as the Examiner labels the video data set in *Gonzales*) does not need to be made up of only non-intra

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video frames because intra-video (I-pictures) frames may appear. This is inconsistent with the claim language of independent claim 21 that requires a “video data set consisting of non-intra video frames.” As is well understand, the term “consisting” is close-ended. Unlike the open-ended term, “comprising,” “consisting” means that no other elements may be present.

2. *Gonzales et al.* fails to disclose “grouping video frames that are only between consecutive I-frames into a video data set” as required by claims 1-3, 5, 7, 12, 14, 16-20, and 22-23.

With regard to the recitation of “grouping video frames that are only between consecutive I-frames into a video data set,” as in independent claim 1, for example, the Examiner argues that Fig. 5 of *Gonzales* meets this claim limitation in showing video frames B, I, P, B, B, P, B, B between consecutive I-frames. While Fig. 5 of *Gonzales* may show, by happenstance, a group of video frames between two I-frames, this is not a teaching of “grouping video frames that are only between consecutive I-frames into a video data set,” for the reasons above. That is, the description, in *Gonzales*, of “[e]ach GOP must start with an I-picture and additional I-pictures can appear within the GOP” (emphasis added) is a description of Fig. 5 and, for reasons explained with regard to claim 21, leaving open the possibility that I-pictures, or intra-video frames, may be present in the “video data set,” is not a description of grouping video frames that are only between consecutive I-frames into a video data set, as required by the instant claims on appeal.

Moreover, to whatever extent one could read Fig. 5 of *Gonzales* as grouping video frames that are only between consecutive I-frames into a video data set, in accordance with the claims on appeal, it is that same video data set that must be split into a plurality of homogeneous files and those homogeneous files must be individually compressed. The Examiner has failed to show

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where, in *Gonzales*, the B, B, P, B, B, P, B, B frames of Fig. 5 are split into homogeneous files and then individually compressed. The Examiner has pointed, generally, to Figs. 11 and 12b for splitting the video data set, and to Figs. 5 and 6 for a plurality of homogeneous files, as well as to Figs. 11 and 12b for individually compressing each of the homogeneous files, but reference to these Figures does not show where the frames between the I-frames in Fig. 5 are split into a plurality of homogeneous files and then individually compressed and the Examiner has not specifically pointed to any description of these Figures which would support the Examiner's position, leaving it to Appellants to hazard a guess as to what, exactly, the Examiner relies upon. Accordingly, no *prima facie* case of anticipation has been shown.

B. CLAIMS 1-3, 11-14, AND 16-23 ARE NOT ANTICIPATED BY *WU ET AL.*

1. *Wu et al.* does not disclose "grouping video frames that are only between consecutive I-frames into a video data set" as required by 1-3, 11-14, 15-20, and 22-23.

With regard to the anticipation rejection of claims 1-3, 11-14, and 16-23 based on *Wu et al.*, as explained in Appellants' principal brief, this reference also fails to disclose or teach the claimed features of a "video data set consisting of non-intra video frames," as in claim 21, for example, and a "grouping video frames that are only between consecutive I-frames into a video data set," as in claim 1, for example.

The Examiner argues that the MPEG standard disclosed by *Wu et al.* is a grouping of video frames (I, P, and B) into a video data set (GOP) wherein the video frames are inherently only between consecutive I-frames, referring to col. 1, lines 35-38, and step 154 in Fig. 8. Moreover, the Examiner argues that *Wu et al.* discloses splitting the video data set (GOP) consisting of non-intra video frames (I-frames, 300 of Fig. 10) into a plurality of data sequences

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(302, 306, 310 of Fig. 10), noting that each layer is considered as a data sequence, and referring to 80' of Fig. 19.

However, col. 1, lines 35-38, of *Wu et al.* merely discloses that video compression using the MPEG standard is well known. Appellants agree with that. But this portion of *Wu et al.* indicates nothing with regard to a "video data set consisting of non-intra video frames," or "grouping video frames that are only between consecutive I-frames into a video data set." With regard to Fig. 8, the description of this figure at col. 9, lines 7-49, merely describes a system for encoding macro blocks in a GOP, the GOP comprising an I-frame and a number of P-frames. The encoding entails encoding each predicted frame (P-frame) into different layers and, at step 154, evaluating whether there are any more P-frames in the GOP to be encoded. But there is no description in the disclosure of *Wu et al.* regarding a "video data set consisting of non-intra video frames" or "grouping video frames that are only between consecutive I-frames into a video data set." While the encoding in *Wu et al.* may involve, in part, the encoding of only P-frames, there is no indication that these P-frames form a video data set consisting of non-intra video frames because there may be I-frames within that video data set. To whatever extent, the Examiner singles out only these P-frames as being in the delineated "video data set," *Wu et al.* does not disclose that such P-frames are split into homogeneous files that are individually compressed, as required by the claims on appeal. The Examiner points to Fig. 10, especially block 300, for such a teaching, but block 300 of Fig. 10 shows incoming frames and block 300 decides whether the incoming frame is an I-frame or a P-frame. If the video data set input to this block consisted only of P-frames, or non-intra-frames, as suggested by the Examiner, there would be no need to decide the type of frame because they would all be P-frames. Therefore, the Examiner's reference to Fig. 10 belies the Examiner's own argument. Accordingly, since the video data set input to block

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300 in Fig. 10 may comprise I-frames or P-frames, *Wu et al.* does not disclose a “video data set consisting of non-intra video frames” or “grouping video frames that are only between consecutive I-frames into a video data set” and cannot anticipate the claims on appeal.

With regard to the rejections of claims 4, 6-10, 15, and 16 under 35 J.S.C. §103, these claims are separately patentable from the claims from which they depend for the reasons set forth at pages 8-10 of the principal brief.

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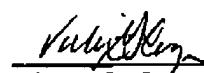
Patent

IV. CONCLUSION AND PRAYER FOR RELIEF

The claims require a "video data set consisting of non-intra video frames" or "grouping video frames that are only between consecutive I-frames into a video data set," but none of the applied references teaches or suggests these claimed features. Appellants, therefore, request the Honorable Board to reverse each of the Examiner's rejections.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-0383 and please credit any excess fees to such deposit account.

Respectfully Submitted,
Attorney for Applicants



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